



TO:

Docket Control

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FROM:

Ernest Johnson

Director

Arizona Corporation Commission DOCKETED

DEC 2 4 2008

DOCKETED BY

DATE:

RE:

December 23, 2008

Utilities Division

STAFF'S 2008 COMPLIANCE REPORT FOR GOLD CANYON SEWER

COMPANY, DOCKET NO. SW-02519A-06-0015 (RATES) AND DECISION

NO. 69664

Introduction

On June 28, 2007, the Commission issued Decision No. 69664 granting a rate increase to Gold Canvon Sewer Company ("Company"). Pursuant to that Decision, Staff was ordered to "conduct annual odor detection site visits and provide a report in this docket by December 31 of each year, as a compliance measure, with the first report to be filed by no later than December 31, 2007." This memorandum is Staff's 2008 compliance report.

Compliance Reports

Staff's Report

Staff conducted three unannounced site visits; each on March 5, 2008, August 15, 2008, and November 5, 2008. All the site visits were conducted by Marlin Scott, Jr., Staff Engineer, accompanied by the Company's Plant Supervisor, Dan Schanaman and/or Operations Manager, During all the visits, Staff toured the wastewater treatment plant Charlie Hernandez. ("WWTP"), the MountainBrook Village Subdivision east of the WWTP, and the commercial area west of the WWTP; i.e., Bashas area. During all these site visits, Staff did not detect any odors.

ADEQ's Report

Compliance Inspection (Attachment No. 1)

On July 30, 2008, the Arizona Department of Environmental Quality ("ADEQ") conducted a complaint inspection of the facility regarding odor complaints reported from local residents. As noted in the ADEO inspection report, various monitoring points on the fence line showed levels of hydrogen sulfide ("H2S") greater than 30 ppb. (The maximum compliance level for H2S is 30 parts per billion ("ppb") for a period of 30 minutes). Data provided by the Docket Control December 23, 2008 Page 2

Company to ADEQ indicated some peak "hits" in H2S monitoring from the fence line ranging from 50 ppb to 140 ppb during June 18, 2008 to July 25, 2008.

According to ADEQ's report, the H2S "hits" were the result of the air scrubber device not functioning at the maximum efficiency due to worn out fan blades. ADEQ also noted that this problem was being corrected during the date of the inspection and further noted that the air scrubber media was to be replaced by the Company.

Notice of Violation (Attachment No. 2)

As a result of its July 30, 2008 inspection, ADEQ issued a Notice of Violation ("NOV") on September 11, 2008 for; 1) the Company's failure to maintain in good working condition the air scrubber device, and 2) the H2S monitoring equipment at the fence line recorded emissions of H2S in the range of 50 to 140 ppb from July 17 to July 25, 2008. The NOV ordered the Company to; a) repair the air scrubber device within 30 days, and b) submit documentation of monitoring results indicating that the H2S emissions were consistently below 30 ppb for a period of three consecutive weeks.

Closure of NOV (Attachment No. 3)

The Company complied with the provisions of the NOV and on December 18, 2008, ADEQ issued a letter indicating the closure of the September 11, 2008 NOV.

EGJ:MSJ:red

Originator: Marlin Scott, Jr.

Attachments: No. 1, No. 2, & No. 3

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Service list for Gold Canyon Sewer Company Docket No. SW-02519A-06-0015

Mr. Jay L. Shapiro Mr. Todd Wiley Mr. Patrick J. Black FENNEMORE CRAIG 3003 N. Central Avenue, Suite 2600 Phoenix, Arizona 85012

Mr. Daniel Pozefsky RUCO 1110 West Washington Street, Ste. 220 Phoenix, Arizona 85007

Mr. Andy Kurtz Mountainbrook Village at Gold Canyon Ranch Association 5674 S. Marble Drive Gold Canyon, Arizona 85218

Mr. Mark Tucker MARK TUCKER, P.C. Attorney for Cal-Am Properties, Inc. 7373 East Highway 60 Gold Canyon, Arizona 85219

Ms. Janice Alward Chief Counsel, LEGAL DIVISION Arizona Corporation Commission 1200 West Washington Street Phoenix, Arizona 85007

Mr. Ernest G. Johnson Director, UTILITIES DIVISION Arizona Corporation Commission 1200 West Washington Street Phoenix, Arizona 85007



ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

Stephen A. Owens

1110 West Washington Street • Phoenix, Arizona 85007 (602) 771-2300 • www.azdeq.gov

September 9, 2008

Charles Hernandez, Operations Manager Algonquin Water Resources of America Inc. 5301 South Superstition Mountain Drive Gold Canyon, AZ 85218

Re: Odor complaint inspection of the Gold Canyon Sewer Company Wastewater Treatment Plant (WWTP), APP No. P100217, Reuse Permit No. R100217, Inventory No. 100217, Middle Gila River Watershed, Inspection ID 124897, Case ID No. 100235

Dear Mr. Hernandez:

The Water Quality Field Services (WQFSU) of the Arizona Department of Environmental Quality (ADEQ) has enclosed an inspection report concerning the inspection conducted at the above referenced facility on July 30, 2008. This was a complaint inspection of the facility regarding recent odor complaints from local residents. The inspection was conducted to determine compliance with Arizona Revised Statute (A.R.S.) Title 49, Chapter 2, Article 3 and Arizona Administrative Code (A.A.C.) Title 18, Chapter 9, and pursuant to the authority in A.R.S. §49-203(B)(1) and A.A.C. R18-9-110 (A).

Potential deficiencies were noted during the course of the inspection, so additional correspondence regarding the inspection may be forthcoming. ADEQ will provide monthly updates on the status of any agency action resulting from the inspection as required by A.R.S. § 41-1009(H).

Additional correspondence on the status of this matter will be forwarded within the next 60 days.

Sincerely,

William J. Hare, E.P.S. Water Quality Field Services Unit

cc: Pinal County Health Department Facility File, Inventory No. 105324 WQFSU Reading file

Northern Regional Office 1801West Route 66•Suite 117• Flagstaff, AZ 86001 (928) 779-0313 Southern Regional Office 400 West Congress Street • Suite 433 • Tucson, AZ 85701 (520) 628-6733

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER OUALITY DIVISION - COMPLIANCE SECTION Field Services Unit

INSPECTION REPORT - WASTEWATER

Facility: Gold Canyon Sewer Company

Place ID: 8561

Aguifer Protection Permit (APP) No: P100217

AZPDES Permit No: N/A

Reuse Permit No: R100217

Inventory No: 100217

Inspected by: William J. Hare, E.P.S.

Inspection Date: July 30, 2008

Start Time: 11:00 am

End time: 1:15 pm

YES

NO

Accompanied by: Dan Schanaman, General Manager

2008

Report Date: September 9, 2008,

N/A

UNKNOWN

WWTF quality meets the following permit requirements:

- **Aguifer Protection Permit** A.
- Reuse Permit B.
- C. **AZPDES Permit**
- 2. A certified operator is employed by the owner per ADEO regulations.
- This system meets permit requirements for operation and maintenance.

	X*		
		X**	
		X	
X			
	X*		
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^{*} This air scrubber device was not functioning at the maximum efficiency. Air monitoring reports show indicate levels of H2S beyond the fence line greater than 30 ppb.

Facility Description

The permittee is authorized to operate a 1.9 million gallons per day (mgd) wastewater treatment plant (WWTP). The effluent enters through the headworks and is treated in two separate trains (bioreactors 1 & 2). The treatment process in each train consists of nitrification/de-nitrification and secondary clarification. The effluent is then filtered through discs and disinfected using chlorination/de-chlorination. There is provision of chemical addition in conjunction with filtration. The effluent is piped to the effluent pump station where it is disposed by either reuse or recharged. When it is reused, it is pumped to effluent storage ponds located at the reuse site,

^{**} Not evaluated

and then used for irrigation under a valid reclaimed water permit. When effluent is recharged, it will be disposed in three recharge basins or vadose zone wells.

Sludge generated from the facility is stored in a sludge holding tank where it is thickened and then passed through a dewatering belt press filter. All the sludge including screenings, grit, and scum, will be hauled off-site for disposal. The WRF is designed and constructed according to plans approved by the ADEQ Wastewater, Recharge, & Reuse Unit.

Air scrubber devices at the plant

The plant has two air scrubber devices including a two staged wet scrubber that treats air that is pumped from the various components. The facility utilizes a negative air system to remove all of the offensive gases from the head space for the various components including the headworks, aeration cells, etc. This device use chlorine and caustic soda to chemically treat the sulfides. The plant also has an activated carbon scrubber device dedicated to the sludge digester.

Inspection Purpose and Scope:

This was an odor complaint inspection. ADEQ has recently received several odor complaints regarding septic odors near the WWTP and in the vicinity of the Mountain Brooke Village Road and Highway 60 and also residences near the WWTP. Some of the odor complaints concerned areas that were over ½ mile from the WWTP and possibly caused by other unidentified sources such as the sewer collection system, etc. The inspection was conducted to determine compliance with A.A.C. Title 18-9-B201.J., which requires that the owner of a WWTP shall not operate the facility so that its emits an offensive odor on a persistent basis beyond the setback distances or beyond the fence line.

Summary of Inspection

Odor Inspection at WWTP:

The inspection entailed a tour of the WWTP for offensive odors including the headworks and the various components. The inspection also entailed a tour of the nearby Mountain Brooke golf course, specifically tee boxes for the 12th and 14th holes. The tour of the site also included a tour of the air relief valve (ARV) located on State Highway 60 about ½ east of the WWTP. The carbon canister filter previously connected the ARV was no longer being used. No offensive odors were detected by the inspection team during the site tour. However, many of the odor related complaints have occurred during the evening hours and/or on weekends.

Air monitoring at the plant perimeter:

The inspection noted the presence of four portable sulfide monitors (OdaLog) on the perimeter of the plant fence line to detect for hydrogen sulfide. In addition, the facility had a permanent odor sensor installed on the air scrubber device at the plant. This was requested by the Administrative Law Judge assigned to the rate hearing case before the ACC.

The inspection noted that all of the perimeter Oda Log monitors were functioning and had an active battery.

<u>Inspection of the Air Scrubber Device(s)</u>

Two staged wet scrubber device.

The inspection noted a problem with the fan blades for the air scrubber device. The epoxy coatings on the fan blades were reportedly 'pitted' and not functioning at maximum capacity. The 'pitting' had caused vibration in the fan blades and the adjoining shaft and has reduced the air flow into the scrubber device. This in turn is believed to have reduced the efficiency of the air scrubber device. This may be a contributing factor in some recently detected higher levels of H2S on the fixed monitor for the outlet on the air scrubber device. The operator indicated that during recent weeks the utility has had a problem with budgetary restraints resulting in inadequate levels of caustic soda (sodium hydroxide) being added to the wet scrubber. This is also a potential problem in allowing the scrubber to achieve peak operating efficiency for the removal of sulfides. This problem is being corrected.

Carbon media Air scrubber device for the Sludge digester

According the operator the media (activated charcoal) was not functional for this device. This air scrubber has not been functional for several months. The device became impaired with some foam and sludge during an incident several months ago. ADEQ was advised that the media has been ordered.

Air monitoring data for the last two months

The operator provided the inspection team with copies of the data that was downloaded from the various monitoring points on the fence line <u>and</u> the fixed odor sensor in the odor scrubber. There were some 'hits' for sulfides on the perimeter monitoring points <u>and</u> on the fixed monitor that was discharged from the odor scrubber. An examination of the data from the perimeter OdaLog monitors shows levels of sulfides > 30 ppb on a periodic basis. The data below indicates a sampling of peak 'hits' in sulfide monitoring from the perimeter monitors on the fence line:

Date	Amount of H2S*	Location of monitor
June 18, 2008	90 ppb	North Corner
June 20, 2008	60 ppb	North Corner
June 26, 2008	50 ppb	East Wall
July 4-9, 2008	30 ppb	East Wall
July 16, 2008	70 ppb	East Wall
July 17, 2008	140 ppb	East Wall
July 22, 2008	70 ppb	East Wall
July 23, 2008	60 ppb	East Wall
July 24, 2008	50 ppb	East Wall
July 25, 2008	50 ppb	East Wall

^{*} The ambient air shall not exceed 30 ppb by volume for any averaging period of 30 minute or more. (Pinal County 5-24-1030.H, 5-24-1030.D)

At least one of the peak 'hits' corresponds to days when ADEQ received odor complaints from local residents.

Findings:

The inspection did not detect any offensive odors at the time of the inspection. However, the data provided by the utility indicated that the air scrubber device(s) were not functioning adequately during recent weeks due to operational and maintenance problems. As a result some the sulfide monitors on the perimeter of the property indicate levels of H2S greater than 30 ppb, which is the standard set by the Pinal County Air Permit issued to Gold Canyon. This may be a contributing factor to recent odor complaints that have been reported to ADEQ addressing septic odors east of the WWTP.

Recommendation:

Place a portable OdaLog device on potential sources of sulfides including the ARV (air relief valve) for the force main.

Compliance Summary

1a.APP-Monitoring and Reporting. The inspection found that the air scrubber device(s) were not functioning efficiently resulting in the release of sulfide emissions > 30ppb beyond the fence line. **Rating: Non Compliance**

- 1b. Reuse Permit Requirements. Not inspected.
- **2. Operator Certification Requirements.** The WWTP is classified as a Class 3 WWTP and the collection system is classified as a Class 2 Collection System. Charlie Hernandez is the operator and holds a Grade 4 WWT and a Grade 4 WWC license issued by ADEQ.
- 3. Maintenance (O&M) Requirements. The air scrubber devices were noted to be in need of repairs to increase the efficiency of the devices to design specifications. Rating: Non Compliance

End of Report



ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

Stephen A. Owens Director

1110 West Washington Street Phoenix, Arizona 85007 (602) 771-2300 www.azdeq.gov

CERTIFIED MAIL
Return Receipt Requested

Case ID #: 100235

September 11, 2008

Gold Canyon Sewer Co Attention: Charles Hernandez PO Box 3302 Carefree, AZ 85377-3302

Subject: Gold Canyon Sewer Co - WWTP, Place ID 8561 6520 E. US 60 / Gold Canyon, AZ 85218

NOTICE OF VIOLATION

The Arizona Department of Environmental Quality (ADEQ) has reason to believe that Gold Canyon Sewer Co as the owner/operator of Gold Canyon Sewer Co - WWTP has violated a requirement of the Arizona Revised Statutes (A.R.S.), a rule within the Arizona Administrative Code (A.A.C.), or an applicable permit/license, administrative order or civil judgment. ADEQ discovered the violations alleged below during an inspection completed on July 30, 2008.

I. LEGAL AUTHORITY and NATURE OF ALLEGED VIOLATION(S)

1. Permit 32629 (P100217) - 4.0, Table III

The facility shall maintain all treatment plant components in good working condition.

Gold Canyon Sewer Company failed to maintain in good working condition the air scrubber device(s) which resulted in hydrogen sulfide emissions beyond the facility boundary in excess of 30 ppb, as recorded between July 17th and 25th, 2008, by the hydrogen sulfide gas monitoring equipment stationed at the fence line.

2. A.A.C. R18-9-B201(J)

Operation of a sewage treatment facility so that it emits an offensive odor on a persistent basis beyond the setback distance.

The hydrogen sulfide gas monitoring equipment at the fence line of Gold Canyon Sewer Company recorded emissions of hydrogen sulfide gas in the range of 50 to 140 ppb from July 17th to the 25th, 2008.

II. DOCUMENTING COMPLIANCE

1. Within 30 calendar days of receipt of this Notice, please submit documentation that the violation(s) never occurred, or a letter to ADEQ that documents the air scrubber device(s) have been repaired and are operating at factory specifications.

Notice of Violation Gold Canyon Sewer Co - WWTP September 11, 2008 Page 2

2. Within 60 calendar days of receipt of this Notice, please submit documentation that the violation(s) never occurred, or data to ADEQ from the facility boundary hydrogen sulfide monitoring devices that demonstrates hydrogen sulfide emissions are consistently below 30 ppb for a period of three consecutive weeks.

III. SUBMITTING COMPLIANCE DOCUMENTATION

Please send all compliance documentation and any other written correspondence regarding this Notice to ADEQ at the following address:

Arizona Department of Environmental Quality, Attention: William J. (Bill) Hare, Water Quality Field Service Compliance Unit, 1110 W Washington St, Phoenix, AZ 85007 MC: 5415B-1

IV. STATEMENT OF CONSEQUENCES

- 1. The time frames within this Notice for achieving and documenting compliance are firm limits. Failure to achieve or document compliance within the time frames established in this Notice will result in an administrative compliance order or civil action requiring compliance within a reasonable time frame, substantial civil penalties, and/or the suspension or revocation of an applicable permit/license. ADEQ will agree to extend the time frames only in a compliance schedule negotiated in the context of an administrative consent order or civil consent judgment.
- 2. Achieving compliance does not preclude ADEQ from seeking civil penalties, and/or suspending or revoking an applicable permit/license for the violation(s) alleged in this Notice as allowed by law.

V. OFFER TO MEET

ADEQ is willing to meet regarding this Notice. To obtain additional information about this Notice or to schedule a meeting to discuss this Notice, please contact William J. (Bill) Hare at (602) 771-4838.

John T. Gibbons, Manager Water Quality Field Service Compliance Unit William J. (Bill) Hare Water Quality Field Service Compliance Unit



ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY



1110 West Washington Street • Phoenix, Arizona 85007 (602) 771-2300 • www.azdeq.gov

December 18, 2008

Case ID: 100235

Gold Canyon Sewer Co Attention: Charles Hernandez P.O. Box 3302 Carefree, AZ 85377

Subject:

Closure of the September 11, 2008 Notice of Violation

Dear Mr. Hernandez:

The Arizona Department of Environmental Quality (ADEQ), has closed the Notice of Violation (NOV) issued to Gold Canyon Sewer Co on September 11, 2008. ADEQ has closed the NOV based upon its determination that Gold Canyon Sewer Co has met the *Documenting Compliance* provisions of the NOV.

Given the number of odor complaints filed against Gold Canyon Sewer Company, ADEQ recommends: An inventory of spare parts and service/maintenance items for the air scrubber system be maintained on site; the development of Operation and Maintenance Manual which includes a routine maintenance schedule.

ADEQ will not proceed with further action at this time. However, if additional information regarding the alleged violations is discovered, or if further violations occur, ADEQ may reconsider its position and take additional action as appropriate and as allowed by law.

Thank you for your efforts to comply with the Arizona's environmental requirements. Should you have any comments or questions regarding this matter, please do not hesitate to contact me at (602) 771-4841.

Sincerely.

John Gibbons, Manager Field Service Unit

Water Quality Compliance

 C: G. Estrada, Arizona Corporation Commission by e-mail at gestrada@azcc.gov Facility File P100217
 Bill Hare, EPS, WQCFSU WQCFSU Reading File Ref: # FS09505

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